

**MATERIAL SAFETY DATA SHEET
F416 WATER DISPLACEMENT NSF**



1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

PRODUCT NAME: **F416 WATER DISPLACEMENT NSF**

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2 HAZARDS IDENTIFIED

PHYSICAL AND CHEMICAL HAZARDS
Extremely Flammable. Irritating to skin. Repeated exposure may cause skin dryness and cracking. Vapours may cause drowsiness and dizziness.

ENVIRONMENTAL HAZARDS
None

3 COMPOSITION/INFORMATION ON INGREDIENTS

Name	EC No.	CAS-No.	Content	Classification
Alkanes C9-12 Isodecane & Isoundecane	-----	64742-48-9	10-24%	F;R10 Xn R65 R66 N;R53
Propan-2-ol	200-661-7	67-63-0	20-30%	F;R11 Xi;R36 R67
Butane	203-448-7	106-97-8	10-15%	F+ R12
Propane	200-827-9	74-98-6	10-15%	F+ R12

The Full Text for all R-Phrases are displayed in Section 16

4 FIRST AID MEASURES

GENERAL INFORMATION
Move the exposed person to fresh air at once. Get medical attention if any discomfort continues.

INHALATION
Move the exposed person to fresh air at once. Get medical attention. Provide rest, warmth and fresh air. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen.

INGESTION
DO NOT INDUCE VOMITING! NEVER MAKE AN UNCONSCIOUS PERSON VOMIT OR DRINK FLUIDS! If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Drink plenty of water. Get medical attention immediately. Provide rest and, warmth and fresh air.

SKIN CONTACT
Remove affected person from source of contamination. Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention promptly if symptoms occur after washing.

EYE CONTACT
Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes and get medical attention.

5 FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA

Fire can be extinguished using: Foam, Carbon Dioxide (CO2), Dry Powder. DO NOT USE water jet.

SPECIFIC HAZARDS

Fire may produce dense black smoke containing hazardous combustion products (see Section 10). Decomposition products may be a hazard to health. Do not allow run-off from fire fighting to enter drains or water courses.

PROTECTIVE MEASURES IN FIRE

Self contained breathing apparatus and full protective clothing must be worn in case of fire.

6 ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS

Wear protective clothing as described in Section 8 of this safety data sheet.

ENVIRONMENTAL PRECAUTIONS

Avoid discharge into drains, water courses or onto the ground.

DO NOT allow to enter drains or watercourses. If the product enters drains or sewers, the local water company should be informed immediately. In the case of contamination of streams, rivers or lakes, inform the relevant environment Agency. Vapours are heavier than air and may spread along floors. Vapours may form explosive mixture with air.

SPILL CLEAN UP METHODS

Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate. Absorb spillage with non-combustible, absorbent material. Collect spillage in containers, seal securely and deliver for disposal accordingly to local regulations. Do not contaminate water sources or sewer.

7 HANDLING AND STORAGE

USAGE PRECAUTIONS

Keep away from heat, sparks and open flame. Do not use sparking tools around aerosols. Avoid spilling, skin and eye contact. Ventilate well, avoid breathing vapours and spray mist, for personal protection, see Section 8. Use approved respirator if air contamination is above accepted level. Never apply pressure to the aerosol as it is a pressurised object and may explode if pressure is applied.

STORAGE PRECAUTIONS

Observe label precautions. Store between 5-25°C in a dry, well ventilated place away from sources of heat, ignition and direct sunlight. No smoking. Store separately from oxidising agents and strongly alkaline/acidic materials.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Name	Std	TWA – 8hrs	STEL – 15mins	Notes
Propan-2-ol	WEL	999 mg m ⁻³	1250 mg m ⁻³	
Butane	WEL	1450 mg m ⁻³	1810 mg m ⁻³	

WEL = Workplace Exposure Limit

PROTECTIVE EQUIPMENT



8 EXPOSURE CONTROLS/PERSONAL PROTECTION - CONTINUED

ENGINEERING MEASURES

Provide adequate general and local exhaust ventilation.

RESPIRATORY EQUIPMENT

If ventilation is insufficient, suitable respiratory protection must be provided. Wear mask supplied with: Gas cartridges suitable for organic substances.

HAND PROTECTION

Use protective gloves.

EYE PROTECTION

Wear approved safety goggles.

OTHER PROTECTION

Wear appropriate clothing to prevent any possibility of liquid contact and repeated or prolonged vapour contact. Provide eyewash station.

HYGIENE MEASURES

DO NOT SMOKE IN WORK AREA. Wash at the end of each shift and before eating, smoking and using the toilet. Promptly remove any clothing that becomes contaminated. Wash promptly with soap and water if skin becomes contaminated. Use appropriate skin cream to prevent drying of skin. When using do not eat, drink or smoke.

9 PHYSICAL AND CHEMICAL PROPERTIES

FORM:	Aerosol
FLASHPOINT:	Not known for blend
COLOUR:	White
ODOUR:	Aromatic

10 STABILITY AND REACTIVITY

STABILITY:	Stable under the recommended storage and handling conditions in Section 7.
CONDITIONS TO AVOID:	Applying heat or pressure to the aerosol may result in explosion And fire. Naked flames, smoking, wet and damp storage conditions and mishandling may also result in explosion and fire.
MATERIALS TO AVOID:	Keep away from oxidising agents, strong alkaline/acidic materials in order to avoid exothermic reactions.
HAZARDOUS DECOMPOSITION PRODUCTS:	In a fire, hazardous decomposition products such as smoke, carbon monoxide, carbon dioxide and oxides of nitrogen may be produced.

11 TOXICOLOGICAL INFORMATION

ACUTE TOXICITY:	Gas or vapour is harmful on prolonged contact or in high concentration. This product can be hazardous when inhaled and/or touched. Irritant to eyes and mucous membranes.
LOCAL EFFECTS:	Hazardous in case of skin contact, irritant.
CHRONIC TOXICITY:	Repeated exposure may cause chronic eye irritation. May cause chemical eye burns. Swallowing concentrated chemical may cause severe internal injury, unconsciousness and death.

Contains no known category 1 or 2 carcinogens, mutagens or reproductive toxicants.

12 ECOLOGICAL INFORMATION

MOBILITY: Partially soluble in water. The majority of this product will evaporate within a day from water or soil surfaces leaving a chemical that will bind to particulate matter to form sediments.

PERSISTANCE AND DEGRADABILITY: The majority of this product is inherently biodegradable, oxidising rapidly by photochemical reactions in air. The remaining chemicals degrade in soil to form smaller molecules, which are either biodegraded in soil or volatised into the air.

BIO ACCUMULATION: This product has the potential to bio accumulate.

ECOTOXICITY: May cause long-term effects in the aquatic environment.

13 DISPOSAL CONSIDERATIONS

GENERAL INFORMATION
Waste to be treated as controlled waste. Disposal to licensed waste disposal site in accordance with local Waste Disposal Authority.

DISPOSAL METHODS
Dispose of waste and residues in accordance with local authority requirements.

14 TRANSPORT INFORMATION

UN NUMBER: UN1950
SHIPPING NAME: Aerosols
HAZARD CLASS: 2.1 (for Sea Transport). Classification code 5F
EmS: F-D, S-U
CLASS: 2
LABELLING: 2.1

15 REGULATORY INFORMATION

LABELLING:



Extremely flammable



Irritant



Dangerous to the Environment

RISK PHRASES	R12 R36 R53 R66 R67	Extremely flammable Irritating to eyes May cause long term effects in the aquatic environment. Repeated exposure may cause skin dryness or cracking Vapours may cause drowsiness and dizziness
SAFETY PHRASES	S2 S16 S24 S25 S23 S36 S61	Keep out of reach of children Keep away from sources of ignition – no smoking Avoid contact with skin Avoid contact with eyes Do not breathe gas/fumes/vapour/spray Wear suitable protective clothing Avoid release to the environment. Refer to special instructions/ Safety data sheets

No chemical safety assessments have been carried out for any of the substances used in this preparation.

16 OTHER INFORMATION

USES ADVISED AGAINST: The product should not be used for any other purpose other than its intended use.
 Handling, storage and conditions to avoid instructions must be followed at all times.

The information contained in this safety data sheet is provided in accordance with the requirements of the Chemical (Hazard Information and Packaging) Regulations. The information we have provided is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not considered a warranty or quality specification. The information relates only to the material designated and may not be valid for such material used in combination with any other materials or in any process unless specified in the text.